

CLAIMS

What is claimed is:

1 1. A method to promote the use of consumables in an imaging device,
2 comprising:
3 detecting consumption of a consumable; and
4 when the consumption of a predefined quantity of the consumable has been
5 detected, rewarding a user of the imaging device.

1 2. The method of claim 1, and wherein rewarding a user comprises printing
2 a coupon using the imaging device.

1 3. The method of claim 1, and further comprising connecting to a global
2 computer network and obtaining, via the global computer network, a certificate verifying
3 the reward.

1 4. The method of claim 3, and wherein connecting to a global computer
2 network and obtaining the certificate verifying the reward is performed automatically in
3 response to detecting that the predefined quantity of the consumable has been
4 consumed.

1 5. The method of claim 1, and wherein the detecting the consumption of the
2 consumable comprises calculating an estimated consumption of the consumable.

1 6. The method of claim 1, and wherein the consumable can be provided by
2 a plurality of separately identified sources, the method further comprising detecting at
3 least one of the identified sources of the consumable, and basing the reward at least in
4 part on whether the predefined quantity of consumable that has been consumed
5 comprises consumable provided by the at least one identified source.

1 7. The method of claim 1, and wherein the consumable is defined by a
2 standard retail price per unit of the consumable, and further wherein the reward allows
3 the user to obtain the consumable at a discount over the standard retail price.

1 8. The method of claim 1, and wherein the consumable comprises sheets
2 of media, and detecting consumption of the consumable comprises counting sheets of
3 the media consumed by the imaging device.

4 9. The method of claim 1, and wherein the consumable comprises an image
5 forming substance, the imaging device forms an image by depositing a quantity of pixels
6 of the image forming substance, and detecting consumption of the image forming
7 substance comprises at least one of calculating, measuring, or estimating the deposited
8 quantity of pixels of the image forming substance.

1 10. A method to promote the use of a plurality of consumables in an imaging
2 device, comprising:

3 detecting consumption by the imaging device of individual quantities of the
4 plurality of consumables;

5 when a predefined collective quantity of the individual quantities of consumables
6 has been detected, rewarding a user of the imaging device with a reward defined by a
7 value; and

8 basing the value of the reward on the individual quantities of each consumable
9 that has been detected as being consumed by the imaging device.

1 11. The method of claim 10, and wherein each of the consumables are
2 defined by individual consumable values, the method further comprising basing the
3 value of the reward on the individual consumable values.

1 12. A method to promote the use of a consumable in a plurality of imaging
2 devices, comprising:

3 detecting consumption of individual quantities of the consumable by each of the
4 imaging devices; and

5 when a predefined collective quantity of the individual quantities of consumable
6 has been detected, generating a reward.

1 13. The method of claim 12, and wherein the reward is generated by
2 transmitting a message to an individual notifying the individual of the reward.

3 14. The method of claim 12, and wherein the reward is generated by printing
4 a reward coupon using at least one of the plurality of imaging devices.

5 15. The method of claim 12, and wherein the consumable can be provided
6 by a plurality of separately identified sources, the method further comprising detecting
7 at least one of the identified sources of the consumable product, and basing the reward
8 at least in part on whether quantity of consumable which has been consumed comprises
9 consumable provided by the at least one identified source.

10 16. The method of claim 12, and wherein the plurality of imaging devices
11 collectively consume a plurality of consumables, the method further comprising:
12 detecting consumption by the plurality of imaging devices of individual quantities
13 of the plurality of consumables;

14 when a predefined collective quantity of the individual quantities of consumables
15 has been detected, generating a reward defined by a value; and

16 basing the value of the reward on the individual quantities of each consumable
17 that has been detected as being consumed by the imaging devices.

1 17. Apparatus for providing the user of a imaging device, which is configured
2 to consume a consumable, with a reward based on a consumption of the consumable
3 by the imaging device, comprising:

4 a consumable consumption detection device configured to detect quantities of
5 the consumable that are consumed by the imaging device and to generate consumption
6 signals in response thereto;

7 an electronic writeable memory device;

8 an electronic readable memory device configured to contain a user reward
9 message;

10 a processor configured to receive the consumption signals and to store a
11 consumption value in the electronic writeable memory device, the consumption value
12 being a function of the received consumption signals, the processor further configured
13 to read from the readable memory device the user reward message when the
14 consumption value is at least equal to a predetermined reward value, and to visually
15 display the reward message to the user.

1 18. The apparatus of claim 17, and further comprising a display device, and
2 wherein the processor visually displays the reward message using the display device.

1 19. The apparatus of claim 17, and wherein the readable memory device is
2 a readable-writeable memory device, the apparatus further comprising a computer
3 network communication device, and wherein the processor is further configured to
4 access a global computer network via the computer network communication device
5 when the consumption value is at least equal to the predetermined reward value and to
6 obtain from the global computer network the reward message, and to store the reward
7 message in the readable-writeable memory device.

1 20. The apparatus of claim 19, and wherein the computer network
2 communication device is an embedded web server located within the imaging device.

1 21. The apparatus of claim 17, and wherein the consumable comprises
2 sheets of media upon which the apparatus can form an image, and further wherein the
3 consumption detection device comprises a sheet counter configured to count sheets of
4 media on which the apparatus has formed an image.

1 22. The apparatus of claim 17, and wherein the consumable comprises an
2 image forming substance, and wherein the apparatus forms an image by depositing
3 pixels of the image forming substance on sheets of media, and further wherein the
4 consumption detection device comprises a pixel counter configured to count the number
5 of pixels of the image forming substance which have been deposited on sheets of media
6 to form an image.

1 23. The apparatus of claim 17, and wherein the consumable can be provided
2 by a plurality of suppliers, at least one of which can be identified by inspection of the
3 consumable, the apparatus further comprising a consumable identification detection
4 device configured to inspect the consumable and detect whether the consumable has
5 been supplied by the at least one supplier and to generate a supplier identification signal
6 in response thereto.

1 24. The apparatus of claim 23, and wherein the processor is further
2 configured to receive the supplier identification signal, and wherein the consumption
3 value is further a function of the received supplier identification signal.

1 25. A computer-readable storage medium for use by a processor configured
2 to execute computer executable instructions to generate a reward message in response
3 to the consumption of a consumable by an imaging device, the medium holding
4 computer executable instructions to:

5 detect consumption of the consumable; and

6 when the consumption of a predefined quantity of the consumable has been
7 detected, generate a reward message.

1 26. The computer-readable storage medium of claim 25, and wherein the
2 instruction to generate a reward message comprises an instruction to print a coupon
3 using the imaging device.

1 27. The computer-readable storage medium of claim 25, the medium further
2 holding computer executable instructions to connect to a global computer network and
3 to obtain, via the global computer network, a certificate verifying the reward.

1 28. The computer-readable storage medium of claim 27, and wherein the
2 instruction to connect to the global computer network and obtain the certificate verifying
3 the reward is configured to be executed automatically in response to a detection that the
4 predefined quantity of the consumable has been consumed.

1 29. The computer-readable storage medium of claim 25, and wherein the
2 instruction to detect the consumption of the consumable comprises an instruction to
3 calculate an estimated consumption of the consumable.

1 30. The computer-readable storage medium of claim 25, and wherein the
2 consumable can be provided by a plurality of separately identified sources, the medium
3 further holding computer executable instructions to detect at least one of the identified
4 sources of the consumable, and to base the reward at least in part on whether the
5 detected quantity of consumable that has been consumed comprises consumable
6 provided by the at least one identified source.

1 31. The computer-readable storage medium of claim 25, and wherein the
2 consumable comprises sheets of media, the instruction to detect the consumption of the
3 consumable comprises an instruction to count sheets of the media consumed by the
4 imaging device.

1 32. The computer-readable storage medium of claim 25, and wherein the
2 imaging device forms an image by depositing a quantity of pixels of the image forming
3 substance, the instruction to detect the consumption of the consumable comprises an
4 instruction to at least one of calculate, measure, or estimate the deposited quantity of
5 pixels of the image forming substance.

1 33. A computer-readable storage medium for use by a processor configured
2 to execute computer executable instructions to generate a reward message in response
3 to the consumption of at least one consumable by an imaging device, the medium
4 holding computer executable instructions to:

5 receive consumption signals from a consumption detection device configured to
6 detect quantities of at least one of the consumables which are consumed by the imaging
7 device;

8 calculate a consumption value as a function of the received consumption signals
9 and store the consumption value in a readable memory device;

10 determine when the consumption value is at least a predetermined reward value;

11 generate the reward message when the consumption value is at least the
12 predetermined reward value and;

13 visually display the reward message.

1 34. The computer-readable storage medium of claim 33, the medium further
2 holding computer executable instructions to connect a computer network communication
3 device to a global computer network and obtain from the global communication network
4 a reward file, and to use the reward file to generate the reward message.

1 35. The computer-readable storage medium of claim 33, the medium further
2 holding computer executable instructions to receive a supplier identification signal from
3 a consumable identification detection device configured to inspect at least one of the
4 consumables and detect whether the at least one consumable product has been
5 supplied by a predetermined supplier, and to use the supplier identification signal to
6 calculate the consumption value.

- 1 36. The computer-readable storage medium of claim 33, the medium further
- 2 holding computer executable instructions to cause the imaging device to print a copy of
- 3 the reward message.

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